

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of:

Takai *et al.*

Patent. No.: 7,364,876

Issued: April 29, 2008

For: **ADIP Protein and Use Thereof**

Confirmation No.: 4948

Art Unit: 1646

Examiner: Basi, Nirmal Singh

Atty. Docket: 2144.0100000/RWE/BAH

**Request for Certificate of Correction
Under 37 C.F.R. § 1.322 and 1.323**

Attn: Certificate of Correction Branch

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

It is hereby requested that a Certificate of Correction under 37 C.F.R. §§ 1.322 and 1.323 be issued for the above-captioned United States Patent. This Certificate of Correction is being requested due to mistakes which appear in the printed patent. These mistakes were made by both the U.S. Patent and Trademark Office and by Applicants. The mistakes made by Applicants are of a clerical or typographical nature, or of a minor character. Patentees submit that correction of these errors does not introduce new matter.

Specifically, the printed patent contains the following errors for which a Certificate of Correction is respectfully requested:

Requested Change to Letters Patent	Location of Support in File History
In the specification at column 6, line 10, please delete "Functional" and insert therefor --Junctional--.	Original specification, at page 10, line 2. PTO's error.

Requested Change to Letters Patent	Location of Support in File History
In the specification at column 11, line 7, please delete "MADIP-M" and insert therefor --mADIP-M--.	Original specification at page 18, line 31. PTO's error.
In the specification at column 13, line 55, please delete "acids" and insert therefor --acid--; and delete "the an" and insert therefor --an--.	Original specification, at page 23, lines 25-26. Applicant's typographical error.
In the specification at column 14, line 57, please delete "Examples" and insert therefor --Example--.	Original specification, at page 25, line 21. Applicant's typographical error.
In the specification at column 18, line 3, please delete "ascites is" and insert therefor --ascites are--.	Original specification at page 31, lines 12- 13. Applicant's typographical error.
In the specification at column 19, line 15, please delete "myocaroditis" and insert therefor --myocarditis--.	Original specification at page 33, line 14. Applicant's typographical error.
In the specification at column 19, line 63, please delete "myocaroditis" and insert therefor --myocarditis--.	Original specification at page 34, line 23. Applicant's typographical error.
In the specification at column 20, line 52, please delete "DNAS" and insert therefor --DNAs--.	Original specification at page 36, line 5. PTO's error.
In the specification at column 25, line 34, please delete "nectin-2 α -AC-L cells" and insert therefor --nectin-2 α - Δ C-L cells--.	Original specification at page 44, line 6. PTO's error.
In the specification at column 26, line 43, please delete "MADIP" and insert therefor --mADIP--.	Original specification at page 46, line 2. PTO's error.
In the specification at column 28, line 50, please delete "MBP-MADIP" and insert therefor --MBP-mADIP--.	Original specification at page 49, line 18. PTO's error.
In the specification at column 30, line 16, please delete "j. Cell Biol." And insert therefor --J. Cell Biol.--.	Original specification at page 52, line 2. PTO's error.
In the specification at column 30, lines 34-35, please delete "nectin-2 α - α C-L cells" and insert therefor --nectin-2 α - Δ C-L cells--.	Original specification at page 52, lines 16-17. PTO's error.
In the specification at column 31, line 2, please delete "concentrated" and insert therefor --concentrate--.	Original specification at page 53, line 13. Applicant's typographical error.
In the specification at column 33, lines 41-42, please delete "2 mM Ca" and insert therefor --2 mM Ca ²⁺ --.	Original specification at page 57, lines 18-19. PTO's error.

Requested Change to Letters Patent	Location of Support in File History
In the specification at column 35 through column 54, please delete the sequence listing and insert the substitute sequence listing filed at the PTO on August 20, 2007.	Substitute Sequence Listing filed August 20, 2007. PTO's error.
In claim 3, at column 53, line 22, please delete "claim 1" and insert therefor --claim 2--.	Claim 23, line 2, of Amendment and Reply filed August 20, 2007. PTO's error.
In claim 4, at column 54, line 17, please delete "supematant" and insert therefor --supernatant--.	Claim 5, line 4, of Amendment and Reply filed August 20, 2007. PTO's error.

Remarks

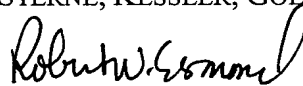
The above-noted corrections do not involve such changes in the patent as would constitute new matter or would require reexamination.

A completed Form PTO/SB/44 accompanies this request, with the above-noted corrections printed thereon. Accordingly, a Certificate of Correction is believed proper and issuance thereof is respectfully requested. These documents are filed electronically through EFS-Web.

This request is accompanied by payment of the fee set forth in 37 C.F.R. § 1.20(a). Fee payment is provided through online credit card payment. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert W. Esmond
Attorney for Patentees
Registration No. 32,893

Date: January 6, 2009

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

883833_1.DOC

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 1 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

At column 6, line 10, delete "Functional" and insert therefor --Junctional--.

At column 11, line 7, delete "MADIP-M" and insert therefor --mADIP-M--.

At column 13, line 55, delete "acids" and insert therefor --acid-- and delete "the an" and insert therefor --an--.

At column 14, line 57, delete "Examples" and insert therefor --Example--.

At column 18, line 3, delete "ascites is" and insert therefor --ascites are--.

At column 19, line 15, delete "myocaroditis" and insert therefor --myocarditis--; and
line 63, delete "myocaroditis" and insert therefor --myocarditis--.

At column 20, line 52, delete "DNAS" and insert therefor --DNAs--.

883944_1.DOC

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DATED: April 29, 2008

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At column 25, line 34, delete "nectin-2 α -AC-L cells" and insert therefor --nectin-2 α - Δ C-L cells--.

At column 26, line 43, delete "MADIP" and insert therefor --mADIP--.

At column 28, line 50, delete "MBP-MADIP" and insert therefor --MBP-mADIP--.

At column 30, line 16, delete "j. Cell Biol." and insert therefor --J. Cell Biol.--; and
lines 34-35, delete "nectin-2 α - α C-L cells" and insert therefor --nectin-2 α - Δ C-L cells--.

At column 31, line 2, delete "concentrated" and insert therefor --concentrate--.

At column 33, lines 41-42, delete "2 mM Ca" and insert therefor --2 mM Ca²⁺--.

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DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

At column 35 through column 54, please delete the sequence listing and insert therefor the following sequence listing:

SEQUENCE LISTING

<110> EISAI CO., LTD.
<120> ADIP PROTEIN AND USE THEREOF
<130> 2144.0100000
<140> US 10/644,084
<141> 2003-08-20
<150> JP 2002-284263
<151> 2002-09-27
<160> 9
<170> PatentIn version 3.3

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Page 4 of 40

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```

<210> 1
<211> 2692
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (80) .. (1927)
<223> /note="afadin-and alpha-actinin-binding protein"

<400> 1
cgtaggagag tgacaggagc tgttgtaagc gtcgcagcac tgagccgcct cctcaggtat      60

cctggctctg gaacttgct atg gga gat tgg atg act gtg aca gat cca gtt      112
      Met Gly Asp Trp Met Thr Val Thr Asp Pro Val
                1                5                10

ctg tgt aca gaa aac aaa aat ctc tct caa tat acc tca gaa aca aag      160
Leu Cys Thr Glu Asn Lys Asn Leu Ser Gln Tyr Thr Ser Glu Thr Lys
      15                20                25

atg tct ccg tcc agt ttg tac tcc cag caa gtt ctg tgc tct tca gta      208
Met Ser Pro Ser Ser Leu Tyr Ser Gln Gln Val Leu Cys Ser Ser Val
      30                35                40

cct tta tcc aaa aac gtg cat ggt gtt ttc ggt gtc ttc tgc aca gga      256
Pro Leu Ser Lys Asn Val His Gly Val Phe Gly Val Phe Cys Thr Gly
      45                50                55

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Page 5 of 40

INVENTOR(S): Takai *et al.*

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aac ttg aag ctg ggc agt gac atg gac cac ctg cag agc tgc tac gcc 496
Asn Leu Lys Leu Gly Ser Asp Met Asp His Leu Gln Ser Cys Tyr Ala
125 130 135

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PATENT NO: 7,364,876 B2

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<p>aaa ctt aag gag cag ttg gaa acg tcc agg cgg gag atg atc ggg ctt Lys Leu Lys Glu Gln Leu Glu Thr Ser Arg Arg Glu Met Ile Gly Leu 140 145 150 155</p>	544
<p>caa gag aga gac agg cag ctg cag tgc aag aac agg agt ttg cat cag Gln Glu Arg Asp Arg Gln Leu Gln Cys Lys Asn Arg Ser Leu His Gln 160 165 170</p>	592
<p>ctc ctg aag aat gag aaa gat gag gta caa aaa tta caa aat atc ata Leu Leu Lys Asn Glu Lys Asp Glu Val Gln Lys Leu Gln Asn Ile Ile 175 180 185</p>	640
<p>gcc agc cgg gct act cag tat aat cat gat gtg aag agg aag gag cgt Ala Ser Arg Ala Thr Gln Tyr Asn His Asp Val Lys Arg Lys Glu Arg 190 195 200</p>	688
<p>gaa tat aat aag cta aag gag cgc ctg cat cag ctc gtt atg aac aag Glu Tyr Asn Lys Leu Lys Glu Arg Leu His Gln Leu Val Met Asn Lys 205 210 215</p>	736
<p>aag gat aaa aac ata gcc atg gat gtt tta aat tat gtg ggt cga gct Lys Asp Lys Asn Ile Ala Met Asp Val Leu Asn Tyr Val Gly Arg Ala 220 225 230 235</p>	784

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gat ggc aaa cga ggc tca tgg agg act gac aaa aca gaa gcc agg aat	832
Asp Gly Lys Arg Gly Ser Trp Arg Thr Asp Lys Thr Glu Ala Arg Asn	
240 245 250	
gaa gat gag atg tac aaa att ctg ttg aat gat tat gag tac cgc cag	880
Glu Asp Glu Met Tyr Lys Ile Leu Leu Asn Asp Tyr Glu Tyr Arg Gln	
255 260 265	
aag cag atc ctg atg gag aac gcg gag ctg aag aag gtc ctc cag cag	928
Lys Gln Ile Leu Met Glu Asn Ala Glu Leu Lys Lys Val Leu Gln Gln	
270 275 280	
atg aag aag gag atg atc tct ctc ctg tct cct cag aag aag aag ccc	976
Met Lys Lys Glu Met Ile Ser Leu Leu Ser Pro Gln Lys Lys Lys Pro	
285 290 295	
agg gaa aga gca gag gac ggc aca ggc act gtt gct atc tcc gat ata	1024
Arg Glu Arg Ala Glu Asp Gly Thr Gly Thr Val Ala Ile Ser Asp Ile	
300 305 310 315	
gaa gat gac tct ggg gaa ctg agc aga gac agc gtg tgg ggc ctt tcc	1072
Glu Asp Asp Ser Gly Glu Leu Ser Arg Asp Ser Val Trp Gly Leu Ser	
320 325 330	

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PATENT NO: 7,364,876 B2

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tgt gac act gtg aga gag cag ctg aca aac agc atc agg aaa cag tgg	1120
Cys Asp Thr Val Arg Glu Gln Leu Thr Asn Ser Ile Arg Lys Gln Trp	
335 340 345	
aga att ttg aaa agt cat gta gaa aaa ctc gat aac caa gct tcg aag	1168
Arg Ile Leu Lys Ser His Val Glu Lys Leu Asp Asn Gln Ala Ser Lys	
350 355 360	
gta cac tca gag ggc ctt aat gag gag gac gtc atc tca cga caa gac	1216
Val His Ser Glu Gly Leu Asn Glu Glu Asp Val Ile Ser Arg Gln Asp	
365 370 375	
cat gag caa gag act gag aaa ctg gag ctg gag att gag cgg tgt aaa	1264
His Glu Gln Glu Thr Glu Lys Leu Glu Leu Glu Ile Glu Arg Cys Lys	
380 385 390 395	
gag atg atc aag gct cag cag cag ctc tta cag cag cag ctg gcc acc	1312
Glu Met Ile Lys Ala Gln Gln Gln Leu Leu Gln Gln Gln Leu Ala Thr	
400 405 410	
acg tgt gat gat gac acc acc tca ctg ttg cga gac tgt tac ttg ctg	1360
Thr Cys Asp Asp Asp Thr Thr Ser Leu Leu Arg Asp Cys Tyr Leu Leu	
415 420 425	

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<p>gaa gaa aag gaa cgc ctt aaa gaa gag tgg acc ctt ttt aaa gag caa Glu Glu Lys Glu Arg Leu Lys Glu Glu Trp Thr Leu Phe Lys Glu Gln 430 435 440</p>	1408
<p>aaa aag aat ttt gag aga gaa agg cga agc ttt aca gaa gct gcc att Lys Lys Asn Phe Glu Arg Glu Arg Arg Ser Phe Thr Glu Ala Ala Ile 445 450 455</p>	1456
<p>cga ttg ggg ttg gag aga aag gcg ttt gaa gaa gag cga gcc agc tgg Arg Leu Gly Leu Glu Arg Lys Ala Phe Glu Glu Glu Arg Ala Ser Trp 460 465 470 475</p>	1504
<p>gta aag cag cag ttt tta aac atg acg aac ttt gac cac cag aac tca Val Lys Gln Gln Phe Leu Asn Met Thr Asn Phe Asp His Gln Asn Ser 480 485 490</p>	1552
<p>gaa aat gtg aaa ctt ttc agt gcc ttc tca gga agt tct gat cca gac Glu Asn Val Lys Leu Phe Ser Ala Phe Ser Gly Ser Ser Asp Pro Asp 495 500 505</p>	1600
<p>aat ctt ata gtc cac tca cgg cca cgg caa aag aag cta cac agt gtg Asn Leu Ile Val His Ser Arg Pro Arg Gln Lys Lys Leu His Ser Val 510 515 520</p>	1648

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gct aat ggg gtg cca gct tgc aca tca aaa ctg act aaa tct ctt cct 1696
Ala Asn Gly Val Pro Ala Cys Thr Ser Lys Leu Thr Lys Ser Leu Pro
525 530 535

gcc tca cct tct act tca gac ttt cgc cag aca cat tca tgt gtg tct 1744
Ala Ser Pro Ser Thr Ser Asp Phe Arg Gln Thr His Ser Cys Val Ser
540 545 550 555

gaa cac agt tcc atc agt gtg ctg aat ata act cct gaa gaa agt aaa 1792
Glu His Ser Ser Ile Ser Val Leu Asn Ile Thr Pro Glu Glu Ser Lys
560 565 570

cca agt gag gtt gca aga gaa agc acg gat cag aag tgg agc gtg cag 1840
Pro Ser Glu Val Ala Arg Glu Ser Thr Asp Gln Lys Trp Ser Val Gln
575 580 585

tcg	agg	ccc	agc	tcg	cgg	gag	ggg	tgc	tac	agc	gga	tgc	tcc	tcg	gcc	1888
Ser	Arg	Pro	Ser	Ser	Arg	Glu	Gly	Cys	Tyr	Ser	Gly	Cys	Ser	Ser	Ala	
		590					595					600				

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**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 11 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

ttc agg agc gct cac ggg gac cga gat gac tta cct taa atgtgcgggc	1937
Phe Arg Ser Ala His Gly Asp Arg Asp Asp Leu Pro	
605 610 615	
tgcaagtgctg ttcccagatg tgcgctagag gagttgacac aggggtgtagc ataaagtcag	1997
tcgtctaact taagatgctc agagttgttt gtttggaactt cgctgtcttc ccccaaagag	2057
ctgaaatgct aagctactta aaaggatgca aagctttggt tgtgtgttag taacagaagc	2117
ccctggctct gtgactgcag gaatgcatgg cgtttggaatg gaaacagaag cgctggaatg	2177
attgcctcgc caggtaccga gaagagcact tttagggact ggttcctgta aacattaaat	2237
attcgtccca agtgtggttg gcattggaag tgtagccttt acttgaatgt atactgtaga	2297
tttttaacaa agcaggttct atatttatta tgttttagtgt gattttggga ttacctcttt	2357
catatgtttt gtgtctgtac ataaatatac atgactatgt taagaggctt taaggtttaa	2417
aaacttcaca ccatgcttga gtatagcatt tcatgccaat taaaatgttt tcagtggcat	2477

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 12 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

```
ggtgtttaca gaggttagga ccactgccac atgacagtta agactttatt tttaagccat      2537
ctgggcaata aaaattcaaa gccccttcat aagctgagtt cagataacta gaactactaa      2597
cgttacattt ttgagatttt taaagcattg tattttattt tatatatgtg aatgttataa      2657
tttctaagag gaatattgat tatggagtaa tggggg                                2692
```

<210> 2
<211> 615
<212> PRT
<213> Mus musculus

<400> 2

```
Met Gly Asp Trp Met Thr Val Thr Asp Pro Val Leu Cys Thr Glu Asn
1              5              10              15
```

```
Lys Asn Leu Ser Gln Tyr Thr Ser Glu Thr Lys Met Ser Pro Ser Ser
                20              25              30
```

```
Leu Tyr Ser Gln Gln Val Leu Cys Ser Ser Val Pro Leu Ser Lys Asn
35              40              45
```

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 13 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Val His Gly Val Phe Gly Val Phe Cys Thr Gly Glu Asn Ile Glu Gln
50 55 60

Ser Ile Ser Tyr Leu Asp Gln Glu Leu Thr Thr Phe Gly Phe Pro Ser
65 70 75 80

Leu Tyr Glu Glu Ser Lys Ser Lys Glu Ala Lys Arg Glu Leu Asn Ile
85 90 95

Val Ala Val Leu Asn Cys Met Asn Glu Leu Leu Val Leu Glu Arg Lys
100 105 110

Asn Leu Leu Ala Gln Glu Ser Val Glu Thr Gln Asn Leu Lys Leu Gly
115 120 125

Ser Asp Met Asp His Leu Gln Ser Cys Tyr Ala Lys Leu Lys Glu Gln
130 135 140

Leu Glu Thr Ser Arg Arg Glu Met Ile Gly Leu Gln Glu Arg Asp Arg
145 150 155 160

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Page 14 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Gln Leu Gln Cys Lys Asn Arg Ser Leu His Gln Leu Leu Lys Asn Glu
165 170 175

Lys Asp Glu Val Gln Lys Leu Gln Asn Ile Ile Ala Ser Arg Ala Thr
180 185 190

Gln Tyr Asn His Asp Val Lys Arg Lys Glu Arg Glu Tyr Asn Lys Leu
195 200 205

Lys Glu Arg Leu His Gln Leu Val Met Asn Lys Lys Asp Lys Asn Ile
210 215 220

Ala Met Asp Val Leu Asn Tyr Val Gly Arg Ala Asp Gly Lys Arg Gly
225 230 235 240

Ser Trp Arg Thr Asp Lys Thr Glu Ala Arg Asn Glu Asp Glu Met Tyr
245 250 255

Lys Ile Leu Leu Asn Asp Tyr Glu Tyr Arg Gln Lys Gln Ile Leu Met
260 265 270

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**UNITED STATES PATENT AND TRADEMARK OFFICE
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Page 15 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Glu Asn Ala Glu Leu Lys Lys Val Leu Gln Gln Met Lys Lys Glu Met
275 280 285

Ile Ser Leu Leu Ser Pro Gln Lys Lys Lys Pro Arg Glu Arg Ala Glu
290 295 300

Asp Gly Thr Gly Thr Val Ala Ile Ser Asp Ile Glu Asp Asp Ser Gly
305 310 315 320

Glu Leu Ser Arg Asp Ser Val Trp Gly Leu Ser Cys Asp Thr Val Arg
325 330 335

Glu Gln Leu Thr Asn Ser Ile Arg Lys Gln Trp Arg Ile Leu Lys Ser
340 345 350

His Val Glu Lys Leu Asp Asn Gln Ala Ser Lys Val His Ser Glu Gly
355 360 365

Leu Asn Glu Glu Asp Val Ile Ser Arg Gln Asp His Glu Gln Glu Thr
370 375 380

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Glu Lys Leu Glu Leu Glu Ile Glu Arg Cys Lys Glu Met Ile Lys Ala
385 390 395 400

Gln Gln Gln Leu Leu Gln Gln Gln Leu Ala Thr Thr Cys Asp Asp Asp
405 410 415

Thr Thr Ser Leu Leu Arg Asp Cys Tyr Leu Leu Glu Glu Lys Glu Arg
420 425 430

Leu Lys Glu Glu Trp Thr Leu Phe Lys Glu Gln Lys Lys Asn Phe Glu
435 440 445

Arg Glu Arg Arg Ser Phe Thr Glu Ala Ala Ile Arg Leu Gly Leu Glu
450 455 460

Arg Lys Ala Phe Glu Glu Glu Arg Ala Ser Trp Val Lys Gln Gln Phe
465 470 475 480

Leu Asn Met Thr Asn Phe Asp His Gln Asn Ser Glu Asn Val Lys Leu
485 490 495

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Phe Ser Ala Phe Ser Gly Ser Ser Asp Pro Asp Asn Leu Ile Val His
500 505 510

Ser Arg Pro Arg Gln Lys Lys Leu His Ser Val Ala Asn Gly Val Pro
515 520 525

Ala Cys Thr Ser Lys Leu Thr Lys Ser Leu Pro Ala Ser Pro Ser Thr
530 535 540

Ser Asp Phe Arg Gln Thr His Ser Cys Val Ser Glu His Ser Ser Ile
545 550 555 560

Ser Val Leu Asn Ile Thr Pro Glu Glu Ser Lys Pro Ser Glu Val Ala
565 570 575

Arg Glu Ser Thr Asp Gln Lys Trp Ser Val Gln Ser Arg Pro Ser Ser
580 585 590

Arg Glu Gly Cys Tyr Ser Gly Cys Ser Ser Ala Phe Arg Ser Ala His
595 600 605

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Gly Asp Arg Asp Asp Leu Pro
610 615

<210> 3
<211> 3195
<212> DNA
<213> Rattus norvegicus

<220>
<221> CDS
<222> (79) .. (1920)

<220>
<221> misc_feature
<222> (2422) .. (2422)
<223> "n"=any one base of a, t, c, or g

<400> 3
gtaggagagt gacaggagct gttgtgcatg cccagcact gaactgcctt ctcagggacc 60

ctggctctgg gactggct atg gga gat tgg atg act gtt aca gat cca gtt 111
Met Gly Asp Trp Met Thr Val Thr Asp Pro Val
1 5 10

ctg tgt aca gaa aac aaa aat ctc tct caa tat acc tca gaa aca aag 159
Leu Cys Thr Glu Asn Lys Asn Leu Ser Gln Tyr Thr Ser Glu Thr Lys
15 20 25

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

atg tct ccg tca agt tta tac tcg cag caa gta ctg tgc tct gca aca	207
Met Ser Pro Ser Ser Leu Tyr Ser Gln Gln Val Leu Cys Ser Ala Thr	
30 35 40	
cct tta tcc aag aat gtg cat ggt gtt ttc agt gcc ttc tgc aca gga	255
Pro Leu Ser Lys Asn Val His Gly Val Phe Ser Ala Phe Cys Thr Gly	
45 50 55	
gag aac atc gaa cag agt att tcg tat ctt gat cag gaa ctg act acc	303
Glu Asn Ile Glu Gln Ser Ile Ser Tyr Leu Asp Gln Glu Leu Thr Thr	
60 65 70 75	
ttc ggt ttc cct tcc ttg tat gaa gaa tcc aaa agt aag gag gcg aag	351
Phe Gly Phe Pro Ser Leu Tyr Glu Glu Ser Lys Ser Lys Glu Ala Lys	
80 85 90	
cga gag tta agt ata gtt gct ctt ctg aac tgc atg aat gag ctg ctt	399
Arg Glu Leu Ser Ile Val Ala Leu Leu Asn Cys Met Asn Glu Leu Leu	
95 100 105	
gtg ctt cag cgg aag aac ctc ctg gcc cag gaa agc gtg gag aca cag	447
Val Leu Gln Arg Lys Asn Leu Leu Ala Gln Glu Ser Val Glu Thr Gln	
110 115 120	
aat ctg aag ctg ggc agt gac atg gac cac ctg cag agc tgc tac gcc	495
Asn Leu Lys Leu Gly Ser Asp Met Asp His Leu Gln Ser Cys Tyr Ala	
125 130 135	

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

aaa	ctt	aag	gaa	cag	ttg	gag	gcc	tcc	agg	cga	gag	atg	atc	agc	ctt	543
Lys	Leu	Lys	Glu	Gln	Leu	Glu	Ala	Ser	Arg	Arg	Glu	Met	Ile	Ser	Leu	
140					145					150					155	
cag	gag	aga	gac	aga	cag	cta	cag	tgc	aaa	aac	agg	aat	ttg	cat	cag	591
Gln	Glu	Arg	Asp	Arg	Gln	Leu	Gln	Cys	Lys	Asn	Arg	Asn	Leu	His	Gln	
				160					165					170		
ctc	ctg	aaa	aac	gag	aaa	gaa	gag	gta	caa	aaa	tta	caa	aat	atc	ata	639
Leu	Leu	Lys	Asn	Glu	Lys	Glu	Glu	Val	Gln	Lys	Leu	Gln	Asn	Ile	Ile	
			175					180					185			
gcc	agt	cgg	gct	act	cag	tat	aat	cat	gat	gtg	aag	aga	aag	gag	cgg	687
Ala	Ser	Arg	Ala	Thr	Gln	Tyr	Asn	His	Asp	Val	Lys	Arg	Lys	Glu	Arg	
		190					195					200				
gag	tac	aat	aaa	ctg	aag	gag	cgt	ctg	cat	cag	ctt	gtt	atg	aac	aag	735
Glu	Tyr	Asn	Lys	Leu	Lys	Glu	Arg	Leu	His	Gln	Leu	Val	Met	Asn	Lys	
	205					210					215					
aag	gat	aaa	aat	ata	gcc	atg	gac	gtt	tta	aat	tac	gtg	ggc	cga	gtg	783
Lys	Asp	Lys	Asn	Ile	Ala	Met	Asp	Val	Leu	Asn	Tyr	Val	Gly	Arg	Val	
220					225					230					235	
gat	gga	aag	cga	ggc	tcc	tgg	agg	act	gat	aaa	aca	gaa	gcc	agg	aat	831
Asp	Gly	Lys	Arg	Gly	Ser	Trp	Arg	Thr	Asp	Lys	Thr	Glu	Ala	Arg	Asn	
				240					245					250		

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

gaa gat gaa atg tac aaa att ctg ctg aat gat tat gag tac cgc cag	879
Glu Asp Glu Met Tyr Lys Ile Leu Leu Asn Asp Tyr Glu Tyr Arg Gln	
255 260 265	
aag cag atc ctg ctg gag aat gcg gag ctg aag aag gtc ctc cag cag	927
Lys Gln Ile Leu Leu Glu Asn Ala Glu Leu Lys Lys Val Leu Gln Gln	
270 275 280	
atg aag aaa gag atg atc tct ctc ctt tct cct caa aag aag aaa ccc	975
Met Lys Lys Glu Met Ile Ser Leu Leu Ser Pro Gln Lys Lys Lys Pro	
285 290 295	
aga gaa aga gca gag gac agc aca ggc act gtt gtc atc tcc gat gta	1023
Arg Glu Arg Ala Glu Asp Ser Thr Gly Thr Val Val Ile Ser Asp Val	
300 305 310 315	
gaa gac gac gct ggg gag ctg agc aga gat ggt gtg tgg agc ctt tcc	1071
Glu Asp Asp Ala Gly Glu Leu Ser Arg Asp Gly Val Trp Ser Leu Ser	
320 325 330	
tgt gac act gtc agg gag cag ctt aca aac agc atc agg aag cag tgg	1119
Cys Asp Thr Val Arg Glu Gln Leu Thr Asn Ser Ile Arg Lys Gln Trp	
335 340 345	
aga att ctg aaa agc cat gtg gaa aaa ctt gat aac caa gct tca aag	1167
Arg Ile Leu Lys Ser His Val Glu Lys Leu Asp Asn Gln Ala Ser Lys	
350 355 360	

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 22 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

<p>gta cac tca gag ggc ttt cat gaa gag gac gtc atc tca cga caa gac Val His Ser Glu Gly Phe His Glu Glu Asp Val Ile Ser Arg Gln Asp 365 370 375</p>	1215
<p>cat gag caa gag act gag aaa ctg gag ctg gag att gag cgg tgt aaa His Glu Gln Glu Thr Glu Lys Leu Glu Leu Glu Ile Glu Arg Cys Lys 380 385 390 395</p>	1263
<p>gag atg atc aag gct cag cag cag ctc tta cag caa cag ctg gcc act Glu Met Ile Lys Ala Gln Gln Gln Leu Leu Gln Gln Gln Leu Ala Thr 400 405 410</p>	1311
<p>gcg tgt gat gac gac acc acc tca ctg ttg cga gac tgt tac ttg ctt Ala Cys Asp Asp Asp Thr Thr Ser Leu Leu Arg Asp Cys Tyr Leu Leu 415 420 425</p>	1359
<p>gaa gaa aag gaa cgc ctt aaa gaa gag tgg tcc ctt ttt aaa gag caa Glu Glu Lys Glu Arg Leu Lys Glu Glu Trp Ser Leu Phe Lys Glu Gln 430 435 440</p>	1407
<p>aaa aag aat ttt gag aga gaa aga cga agc ttt aca gaa gct gct att Lys Lys Asn Phe Glu Arg Glu Arg Arg Ser Phe Thr Glu Ala Ala Ile 445 450 455</p>	1455
<p>cgc ttg ggg ttg gag aga aag gcg ttt gag gaa gag cga gcc agc tgg Arg Leu Gly Leu Glu Arg Lys Ala Phe Glu Glu Glu Arg Ala Ser Trp 460 465 470 475</p>	1503

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 23 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

gtg aag cag cag ttt tta aac atg acg acc ttt gat cac cag aac tca	1551
Val Lys Gln Gln Phe Leu Asn Met Thr Thr Phe Asp His Gln Asn Ser	
480 485 490	
 gaa aat gtg aaa ctt ttc agt gcc ttt tca gga agt tct gat cca gac	1599
Glu Asn Val Lys Leu Phe Ser Ala Phe Ser Gly Ser Ser Asp Pro Asp	
495 500 505	
 aat ctt ata gtc cac cca cgg cca cgg caa aag aag cca cac agt gtc	1647
Asn Leu Ile Val His Pro Arg Pro Arg Gln Lys Lys Pro His Ser Val	
510 515 520	
 gct aat ggg gtg cca gct tgc aca tcc aaa ctg gct aag tct ctt ccg	1695
Ala Asn Gly Val Pro Ala Cys Thr Ser Lys Leu Ala Lys Ser Leu Pro	
525 530 535	
 acc tca cct tca gac ttc tgc ccg tct cgc tca tgt gtg tct gag cac	1743
Thr Ser Pro Ser Asp Phe Cys Pro Ser Arg Ser Cys Val Ser Glu His	
540 545 550 555	
 agt ccc gtc agt gcg ctg act gtg act cct gaa gaa acc aaa ccg aat	1791
Ser Pro Val Ser Ala Leu Thr Val Thr Pro Glu Glu Thr Lys Pro Asn	
560 565 570	
 gag gtt gga aga gaa agt acg gac cag aag tgg agc gtg gtg tcc aga	1839
Glu Val Gly Arg Glu Ser Thr Asp Gln Lys Trp Ser Val Val Ser Arg	
575 580 585	

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UNITED STATES PATENT AND TRADEMARK OFFICE
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Page 24 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

ccc agc tcc cgg gag ggt tgc tac ggt gga tgc tcc tcg gcc tac aca 1887
Pro Ser Ser Arg Glu Gly Cys Tyr Gly Gly Cys Ser Ser Ala Tyr Thr
590 595 600

agc tcc cac gtg gaa cga gat gac tta cca tag gtgctcgggc tgcagcgctg 1940
 Ser Ser His Val Glu Arg Asp Asp Leu Pro
 605 610

tcctggagtg catgagagga attgacacgg ggtgtagcat aaagtcagcc atctaccgta 2000

agatgtcggg gttatttqtt tggacttccc agtctttccc caaagagctg aaacgcttta 2060

gagqatgcga aagctttggc tgtgtgttag taacagaagc ctctggctct gtgagtaaag 2120

gaatgtatgg tgtttggtgg gaaacaaaag cacgagaatg atttcctctt ccgggtactg 2180

agaatagcac ttttaqqgac tgattcttqt aaacattaaa tttttgtccc aagtatgggtt 2240

gqcattggaa gtttagtctt tacttgaatg tacactgtag atttttaaca aagcagttct 2300

atatttatta tgtttagtgt gatatttgga ttacctcttt catatgtttt ctgcctgtac 2360

ataaatatac atgactatgt taagaggctt taaggtttaa aaatttcaca ccatgctcga 2420

qnatagcatt tcatgccaat taaaatgttt tcagtggcat ggtgtttaca gatgtgttag 2480

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**UNITED STATES PATENT AND TRADEMARK OFFICE
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Page 25 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

gaccactgcc	acatgacagt	taagatttta	ttttaagcc	atttgggcaa	taaaaattca	2540
aagccacttc	ataagctaag	ttcagatagc	taaaactact	aacattacat	ttttgagatt	2600
tataaagcat	tatatatttat	tttatatatg	tgactgttat	aattttctaag	aggaatgtgg	2660
attatgaagc	aatgggggaa	agacagaagt	gactaatagt	gcaagagcat	tgggtgaagg	2720
gacggctgat	gaggatatgg	gagacctggg	tggtgatctt	ttccttaccg	acggtgcggt	2780
gcggcgatct	ctgtaccgcc	agggctttct	atcattgcca	atacttttgt	aattaaagag	2840
attttcaact	acataccact	actaaagtaa	gacagtgtaa	aactttggct	tttghtaattg	2900
acactctgga	cactggtgtg	ttgttcattt	ctagaacaat	cgtaggctct	tttctctgtt	2960
tctgctgcat	gtttcttcat	gagaagtatg	ttactattga	cagtaatgac	actgacagtg	3020
actgtagacg	taggcccaga	cttctcctgg	gtggattttc	atccagcagc	ttttaagtgc	3080
ctcgccctgc	tcgtctctgc	acatagccgc	cgacacaagc	cctcgcttga	tgatgcagat	3140
agtcacatctg	cctttctctc	cccttgccct	gctatgactg	ttgcattaaa	ttcat	3195

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 26 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

<210> 4
<211> 613
<212> PRT
<213> Rattus norvegicus

<400> 4

Met	Gly	Asp	Trp	Met	Thr	Val	Thr	Asp	Pro	Val	Leu	Cys	Thr	Glu	Asn
1				5					10					15	

Lys	Asn	Leu	Ser	Gln	Tyr	Thr	Ser	Glu	Thr	Lys	Met	Ser	Pro	Ser	Ser
			20					25					30		

Leu	Tyr	Ser	Gln	Gln	Val	Leu	Cys	Ser	Ala	Thr	Pro	Leu	Ser	Lys	Asn
			35				40					45			

Val	His	Gly	Val	Phe	Ser	Ala	Phe	Cys	Thr	Gly	Glu	Asn	Ile	Glu	Gln
	50					55					60				

Ser	Ile	Ser	Tyr	Leu	Asp	Gln	Glu	Leu	Thr	Thr	Phe	Gly	Phe	Pro	Ser
65					70				75					80	

Leu	Tyr	Glu	Glu	Ser	Lys	Ser	Lys	Glu	Ala	Lys	Arg	Glu	Leu	Ser	Ile
				85				90					95		

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 27 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Val Ala Leu Leu Asn Cys Met Asn Glu Leu Leu Val Leu Gln Arg Lys
 100 105 110

Asn Leu Leu Ala Gln Glu Ser Val Glu Thr Gln Asn Leu Lys Leu Gly
 115 120 125

Ser Asp Met Asp His Leu Gln Ser Cys Tyr Ala Lys Leu Lys Glu Gln
 130 135 140

Leu Glu Ala Ser Arg Arg Glu Met Ile Ser Leu Gln Glu Arg Asp Arg
 145 150 155 160

Gln Leu Gln Cys Lys Asn Arg Asn Leu His Gln Leu Leu Lys Asn Glu
 165 170 175

Lys Glu Glu Val Gln Lys Leu Gln Asn Ile Ile Ala Ser Arg Ala Thr
 180 185 190

Gln Tyr Asn His Asp Val Lys Arg Lys Glu Arg Glu Tyr Asn Lys Leu
 195 200 205

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

Page 28 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Lys Glu Arg Leu His Gln Leu Val Met Asn Lys Lys Asp Lys Asn Ile
210 215 220

Ala Met Asp Val Leu Asn Tyr Val Gly Arg Val Asp Gly Lys Arg Gly
225 230 235 240

Ser Trp Arg Thr Asp Lys Thr Glu Ala Arg Asn Glu Asp Glu Met Tyr
245 250 255

Lys Ile Leu Leu Asn Asp Tyr Glu Tyr Arg Gln Lys Gln Ile Leu Leu
260 265 270

Glu Asn Ala Glu Leu Lys Lys Val Leu Gln Gln Met Lys Lys Glu Met
275 280 285

Ile Ser Leu Leu Ser Pro Gln Lys Lys Lys Pro Arg Glu Arg Ala Glu
290 295 300

Asp Ser Thr Gly Thr Val Val Ile Ser Asp Val Glu Asp Asp Ala Gly
305 310 315 320

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Page 29 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Glu Leu Ser Arg Asp Gly Val Trp Ser Leu Ser Cys Asp Thr Val Arg
325 330 335

Glu Gln Leu Thr Asn Ser Ile Arg Lys Gln Trp Arg Ile Leu Lys Ser
340 345 350

His Val Glu Lys Leu Asp Asn Gln Ala Ser Lys Val His Ser Glu Gly
355 360 365

Phe His Glu Glu Asp Val Ile Ser Arg Gln Asp His Glu Gln Glu Thr
370 375 380

Glu Lys Leu Glu Leu Glu Ile Glu Arg Cys Lys Glu Met Ile Lys Ala
385 390 395 400

Gln Gln Gln Leu Leu Gln Gln Gln Leu Ala Thr Ala Cys Asp Asp Asp
405 410 415

Thr Thr Ser Leu Leu Arg Asp Cys Tyr Leu Leu Glu Glu Lys Glu Arg
420 425 430

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

Page 30 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Leu Lys Glu Glu Trp Ser Leu Phe Lys Glu Gln Lys Lys Asn Phe Glu
435 440 445

Arg Glu Arg Arg Ser Phe Thr Glu Ala Ala Ile Arg Leu Gly Leu Glu
450 455 460

Arg Lys Ala Phe Glu Glu Glu Arg Ala Ser Trp Val Lys Gln Gln Phe
465 470 475 480

Leu Asn Met Thr Thr Phe Asp His Gln Asn Ser Glu Asn Val Lys Leu
485 490 495

Phe Ser Ala Phe Ser Gly Ser Ser Asp Pro Asp Asn Leu Ile Val His
500 505 510

Pro Arg Pro Arg Gln Lys Lys Pro His Ser Val Ala Asn Gly Val Pro
515 520 525

Ala Cys Thr Ser Lys Leu Ala Lys Ser Leu Pro Thr Ser Pro Ser Asp
530 535 540

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**UNITED STATES PATENT AND TRADEMARK OFFICE
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Page 31 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Phe Cys Pro Ser Arg Ser Cys Val Ser Glu His Ser Pro Val Ser Ala
545 550 555 560

Leu Thr Val Thr Pro Glu Glu Thr Lys Pro Asn Glu Val Gly Arg Glu
565 570 575

Ser Thr Asp Gln Lys Trp Ser Val Val Ser Arg Pro Ser Ser Arg Glu
580 585 590

Gly Cys Tyr Gly Gly Cys Ser Ser Ala Tyr Thr Ser Ser His Val Glu
595 600 605

Arg Asp Asp Leu Pro
610

<210> 5
<211> 22
<212> DNA
<213> Artificial Sequence

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 32 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

<220>

<223> an artificially synthesized primer sequence

<400> 5

cgtaggagag tgacaggagc tg

22

<210> 6

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> an artificially synthesized primer sequence

<400> 6

ggttatcgag tttttctaca tgac

24

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> an artificially synthesized primer sequence

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Atty. Dkt. No. 2144.0100000/RWE/BAH

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 33 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

<400> 7
cgtaggagag tgacaggagc tg 22

<210> 8
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> an artificially synthesized primer sequence

<400> 8
ttcctgtttt tgcactgtag ctg 23

<210> 9
<211> 626
<212> PRT
<213> Homo sapiens

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 34 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

<400> 9

Thr	Ser	Ser	Ser	Gly	Ile	Leu	Ala	Leu	Glu	Ile	Ala	Met	Gly	Asp	Trp
1				5					10					15	

Met	Thr	Val	Thr	Asp	Pro	Gly	Leu	Ser	Ser	Glu	Ser	Lys	Thr	Ile	Ser
			20					25					30		

Gln	Tyr	Thr	Ser	Glu	Thr	Lys	Met	Ser	Pro	Ser	Ser	Leu	Tyr	Ser	Gln
		35					40					45			

Gln	Val	Leu	Cys	Ser	Ser	Ile	Pro	Leu	Ser	Lys	Asn	Val	His	Ser	Phe
	50					55					60				

Phe	Ser	Ala	Phe	Cys	Thr	Glu	Asp	Asn	Ile	Glu	Gln	Ser	Ile	Ser	Tyr
65					70					75					80

Leu	Asp	Gln	Glu	Leu	Thr	Thr	Phe	Gly	Phe	Pro	Ser	Leu	Tyr	Glu	Glu
				85				90						95	

Ser	Lys	Gly	Lys	Glu	Thr	Lys	Arg	Glu	Leu	Asn	Ile	Val	Ala	Val	Leu
			100					105					110		

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Page 35 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Asn	Cys	Met	Asn	Glu	Leu	Leu	Val	Leu	Gln	Arg	Lys	Asn	Leu	Leu	Ala
		115					120					125			

Gln	Glu	Asn	Val	Glu	Thr	Gln	Asn	Leu	Lys	Leu	Gly	Ser	Asp	Met	Asp
		130				135					140				

His	Leu	Gln	Ser	Cys	Tyr	Ser	Lys	Leu	Lys	Glu	Gln	Leu	Glu	Thr	Ser
145					150					155					160

Arg	Arg	Glu	Met	Ile	Gly	Leu	Gln	Glu	Arg	Asp	Arg	Gln	Leu	Gln	Cys
				165					170					175	

Lys	Asn	Arg	Asn	Leu	His	Gln	Leu	Leu	Lys	Asn	Glu	Lys	Asp	Glu	Val
			180					185					190		

Gln	Lys	Leu	Gln	Asn	Ile	Ile	Ala	Ser	Arg	Ala	Thr	Gln	Tyr	Asn	His
		195					200					205			

Asp	Met	Lys	Arg	Lys	Glu	Arg	Glu	Tyr	Asn	Lys	Leu	Lys	Glu	Arg	Leu
	210						215				220				

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Page 36 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

His	Gln	Leu	Val	Met	Asn	Lys	Lys	Asp	Lys	Lys	Ile	Ala	Met	Asp	Ile
225					230					235					240

Leu	Asn	Tyr	Val	Gly	Arg	Ala	Asp	Gly	Lys	Arg	Gly	Ser	Trp	Arg	Thr
				245					250					255	

Gly	Lys	Thr	Glu	Ala	Arg	Asn	Glu	Asp	Glu	Met	Tyr	Lys	Ile	Leu	Leu
			260					265					270		

Asn	Asp	Tyr	Glu	Tyr	Arg	Gln	Lys	Gln	Ile	Leu	Met	Glu	Asn	Ala	Glu
		275					280					285			

Leu	Lys	Lys	Val	Leu	Gln	Gln	Met	Lys	Lys	Glu	Met	Ile	Ser	Leu	Leu
	290					295					300				

Ser	Pro	Gln	Lys	Lys	Lys	Pro	Arg	Glu	Arg	Val	Asp	Asp	Ser	Thr	Gly
305					310					315					320

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

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Thr Val Ile Ser Asp Val Glu Glu Asp Ala Gly Glu Leu Ser Arg Glu
325 330 335

Ser Met Trp Asp Leu Ser Cys Glu Thr Val Arg Glu Gln Leu Thr Asn
340 345 350

Ser Ile Arg Lys Gln Trp Arg Ile Leu Lys Ser His Val Glu Lys Leu
355 360 365

Asp Asn Gln Val Ser Lys Val His Leu Glu Gly Phe Asn Asp Glu Asp
370 375 380

Val Ile Ser Arg Gln Asp His Glu Gln Glu Thr Glu Lys Leu Glu Leu
385 390 395 400

Glu Ile Gln Gln Cys Lys Glu Met Ile Lys Thr Gln Gln Gln Leu Leu
405 410 415

Gln Gln Gln Leu Ala Thr Ala Tyr Asp Asp Asp Thr Thr Ser Leu Leu
420 425 430

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Page 38 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Arg Asp Cys Tyr Leu Leu Glu Glu Lys Glu Arg Leu Lys Glu Glu Trp
435 440 445

Ser Leu Phe Lys Glu Gln Lys Lys Asn Phe Glu Arg Glu Arg Arg Ser
450 455 460

Phe Thr Glu Ala Ala Ile Arg Leu Gly Leu Glu Arg Lys Ala Phe Glu
465 470 475 480

Glu Glu Arg Ala Ser Trp Leu Lys Gln Gln Phe Leu Asn Met Thr Thr
485 490 495

Phe Asp His Gln Asn Ser Glu Asn Val Lys Leu Phe Ser Ala Phe Ser
500 505 510

Gly Ser Ser Asp Trp Asp Asn Leu Ile Val His Ser Arg Gln Pro Gln
515 520 525

Lys Lys Pro His Ser Val Ser Asn Gly Ser Pro Val Cys Met Ser Lys
530 535 540

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Page 39 of 40

PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Leu Thr Lys Ser Leu Pro Ala Ser Pro Ser Thr Ser Asp Phe Cys Gln
545 550 555 560

Thr Arg Ser Cys Ile Ser Glu His Ser Ser Ile Asn Val Leu Asn Ile
565 570 575

Thr Ala Glu Glu Ile Lys Pro Asn Gln Val Gly Gly Glu Cys Thr Asn
580 585 590

Gln Lys Trp Ser Val Ala Ser Arg Pro Gly Ser Gln Glu Gly Cys Tyr
595 600 605

Ser Gly Cys Ser Leu Ser Tyr Thr Asn Ser His Val Glu Lys Asp Asp
610 615 620

Leu	Pro
625	

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PATENT NO: 7,364,876 B2

DATED: April 29, 2008

INVENTOR(S): Takai *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

In claim 3, at column 53, line 22, please delete "claim 1" and insert therefor --claim 2--.

In claim 4, at column 54, line 17, please delete "supematant" and insert therefor --supernatant--.

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